Acid Tanker

Oil & Gas — Upstream
ARC S4+ Coating
Case Study 102

Challenge

Issue

Corrosive chemicals used in frack tanks require protection that lasts >18 months to meet service company contract requirements.

Previous linings fail in 6 months, requiring significant tank repairs at 9 months.

Goals

- Protective lining to last >18 months
- Increased flexibility of lining to handle transport vibration

Root Cause

35% HCL attacks unprotected steel. Road vibration creates cracks in previous lining.



Failed phenolic liner

Solution

Preparation

- Decontaminate surfaces
- Grit blast to Sa 3 with 3 mil (75 μm) angular profile

Application

- Apply ARC S4+ by brush as stripe coat to welds
- 2. Apply 2 coats of ARC S4+ a 10-15 mils (250-375 μ m) per coat

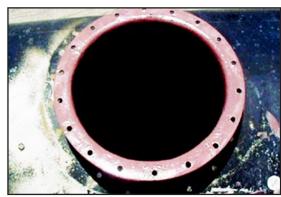
Results

Client Reported

- At 6 months, the first tank inspection showed no signs of under film corrosion or attack
- After 3 years of service, tanks and piping manifolds showed no signs of corrosion



ARC S4+ applied to internals



Top manway